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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,411	08/13/2001	Ian Hendry	P2232C-773	7456

7590 01/30/2003

James W. Peterson, Esquire
BURNS, DOANE, SWECKER & MATHIS, L.L.P.
P.O. Box 1404
Alexandria, VA 22313-1404

EXAMINER	
DU, THUAN N	

ART UNIT	PAPER NUMBER
2185	

DATE MAILED: 01/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/927,411	HENDRY ET AL.	
	Examiner	Art Unit	
	Thuan N. Du	2185	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 August 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *22-97* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *22-97* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 22-97 are presented for examination.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 22-97 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-33 of U.S. Patent No. 6,282,646 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the system would operate in the same manner when the display manager either associates the frame buffer associated with the computer system with the added display device or modifies the allocation of display space to display devices in accordance with the addition of a video device.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 22-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admission of prior art [AAPA] and "Software Architecture for the Support of Multiple Adapters on an Interrupt Level" – IBM Technical Disclosure Bulletin – September 1986 [IBMTDB].

6. Regarding claims 22, 64, 85, 86 and 94, AAPA teaches a method for reconfiguring a computer system accommodate changes in a display environment comprising the steps of:

determining a new display device has been added [application's specification, p. 2, lines 3-7];

providing a notification to a display manager of the addition of the display device to the frame buffer associated with the computer system [application's specification, p. 2, lines 3-9];

associating, by the display manager, the frame buffer associated with the computer system with the added display device [application's specification, p. 2, lines 3-9];

AAPA does not teach the steps of receiving an indication of an addition of an input/output device to a frame buffer associated with the computer and determining, in response to the indication, whether the input/output device that has been added is a display device. Specifically, AAPA does not teach the step of calling a routine associated with a display device when an unknown (have not yet determined) input/output device is added to the system, then ensuring the unknown input/output device is a display device thereafter.

IBMTDB teaches the step of calling the interrupt routine and give control the highest priority card by default [page 2, lines 4-6 of last paragraph], then determining if that is the highest priority card interrupt [page 2, lines 6-8 of last paragraph].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA and IBMTDB because it would increase the flexibility of the system by allowing the system to prepare to reconfigure the system with a newly added display device when an input/output device is added to a frame buffer, then ensuring the input/output device is a display device thereafter.

7. Regarding claims 23 and 65, AAPA teaches the step of registering the added display device as a new display device [application's specification, p. 2, lines 7-9].

8. Regarding claims 24-35, 66-77, 87 and 95, these claims are directed to method steps for reconfiguring the system when a new display device is added of claims 22, 64, 85 and 94. As stated above, AAPA and IBMTDB teach the invention substantially as set forth in claims 22, 64, 85 and 94. At the time of the invention, one of ordinary skill in the art would have readily recognized that AAPA and IBMTDB may obviously also teach the method steps of claims 22, 64, 85 and 94 as set forth in claims 24-35, 66-77, 87 and 95. As such, claims 24-35, 66-77, 87 and 95 are rejected under the same rationale with respect to claims 22, 64, 85 and 94.

9. Regarding claims, 36-42, 78-84, 88-89 and 96-97, these claims are directed to method steps for reconfiguring the system when a display device is removed. As stated above, AAPA and IBMTDB teach the method steps for reconfiguring the system when a new display device is added as set forth in claims 22-35, 64-77, 85-87 and 94-95. At the time of the invention, one of ordinary skill in the art would have readily recognized that AAPA and IBMTDB may obviously

also teach the method steps for reconfiguring the system when a display device is removed. As such, claims 36-42, 78-84, 88-89 and 96-97 are rejected under the same rationale with respect to claims 22-35, 64-77, 85-87 and 94-95.

10. Regarding claims 43-63 and 90-93, AAPA and IBMTDB together teach the claimed method steps. Therefore, AAPA and IBMTDB together teach the apparatus to implement the claimed method steps.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan N. Du whose telephone number is (703) 308-6292 or via e-mail, **thuan.du@uspto.gov**. The examiner can normally be reached on Monday-Friday: 9:00 AM - 5:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on (703) 305-9717.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

- (703) 746-7238 [After Final Communication]
- (703) 746-7239 [Official Communication]
- (703) 746-7240 [Non-Official Communication]

and/or:

(703) 746-5668 (use this fax number, only after approval by Examiner, for "INFORMAL" or "DRAFT" communication).

Hand-delivered responses should be brought to:

Crystal Park II
2121 Crystal Drive
Arlington, VA 22202
Fourth Floor (Receptionist).

Thuan N. Du
January 24, 2003

THOMAS LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100